

**IN THE U.S. PATENT AND TRADEMARK OFFICE BEFORE  
THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re application of

Jorkki HYVONEN

Conf. 9230

Application No. 10/520,171

Group 2626

Filed January 4, 2005

Examiner M. Colucci

SEARCHING FOR SYMBOL STRING

**REPLY BRIEF**

MAY IT PLEASE YOUR HONORS:

As set forth in the Appeal Brief submitted November 16, 2009, there are four issues on appeal. The Examiner has submitted an Examiner's Answer directed to each issue on appeal and this Reply Brief responds to each issue in the Examiner's Answer.

With respect to the first issue, in the Examiner's Answer on pages 4 and 5, the Examiner characterizes claim 15 as being a process. However, claim 15 is directed to an apparatus.

Thus, contrary to the position set forth in the Examiner's Answer, claim 15 does not recite steps, but recites structure, such as "means for creating a trie structure", "an input" and "selection means".

By way of example, paragraphs [0042]-[0046] disclose an exemplary apparatus as a computer having a memory. Figure 3 depicts an exemplary apparatus 10 that includes functional blocks

that might be implemented by a computer program, at least one circuit, or a combination of the two in the same apparatus.

In view of this, it is believed that claim 15 complies with the statutory invention requirements of 35 U.S.C. 101, by being directed to an apparatus.

Moreover, even if somehow one were to consider claim 15 as being directed to a process, claim 15 produces a tangible result, i.e. the recited response, which is a selected symbol string. Accordingly, the rejection is believed to be improper and reversal of the same is respectfully requested.

As to the second issue, the position set forth in the Examiner's Answer is that a computer readable medium is not disclosed or supported within the specification of the present invention. The Appellant offered several passages of the specification that disclose a computer readable medium (see Appeal Brief, page 7, lines 11-24). The Examiner has not explained why these passages do not support a computer readable medium and merely states that there is lack of support.

Since these passages disclose "a data medium readable by computer", one of ordinary skill in the art would understand that appellant had possession of a computer readable medium and thus, reversal of the 35 USC 112, first paragraph rejection is respectfully requested.

As to the third issue, the position set forth in the Examiner's Answer is that a computer loadable with a program is not the same as a computer loaded with the program.

Nevertheless, the requirements of 35 U.S.C. 112, second paragraph are believed to be met because one of ordinary skill in the art would understand what is claimed when the claim is read in light of the specification. That is, one of ordinary skill in the art would understand that the apparatus need not be pre-loaded with the program and only need be capable of being loaded with a program and that the apparatus can be operated based on a computer program, circuits or a combination of the two, as is disclosed in the specification.

Accordingly, it is believed that one of ordinary skill in the art would understand what is claimed when the claim is read in light of the specification and therefore, claim 15 complies with 35 USC 112, second paragraph.

As to the fourth and final issue, the Examiner's Answer does not discuss the fact that BALLARD is related to a trie structure while KWOK is not. Rather, KWOK is related to a recognition stack that is used to recognize handwritten queries (see paragraphs [0026] - [0029] of KWOK).

The recognition stack of KWOK is then scored using various techniques (see paragraphs [0036]-[0066]). One of these techniques is the offered "edit distance calculation" (paragraph [0062]).

Even if one of ordinary skill in the art were to somehow choose the "edit distance calculation" of KWOK over all

the other techniques offered by KWOK, the claimed invention would not result.

Claim 8 not only requires a distance calculation as in KWOK, but also requires that such distance calculation is at a calculation point. Claim 8 recites "proceeding from the starting point of the trie data structure along a branch to a calculation point indicated by the next symbol". Emphasis added.

By contrast, KWOK looks at the whole word and calculates the number of characters that are different between two words. In view of this, KWOK is unrelated to a trie structure and would not lead to the claimed length difference calculation, because the calculations in KWOK are not done in the same way or to the same parts of the strings.

Accordingly, it would not have been obvious, under the meaning of 35 USC 103(a) to modify BALLARD in view of KWOK in the manner suggested.

Moreover, KWOK does not calculate at the calculation point **also** the smallest possible length difference corresponding to each distance that indicates how much the length of the remaining part of the input symbol string not examined in the distance calculation differs from the lengths remaining in the symbols strings passing through the calculation point.

Rather, KWOK does a single calculation: (worst case edit distance - edit distance)/worst case edit distance. Even if one were to do another pass/calculation as suggested on page 16 of the Examiner's Answer (which is **not** taught by KWOK), such calculation would be on the entire word in order to calculate the number of characters that are different between two words.

KWOK does not suggest a calculation on part of the input symbol string and that that part of the input symbol string has not been examined as part of a distance calculation (or has not been examined at all).

As to the reference to Figure 2 of KWOK on pages 16 and 17 of the Examiner's Answer, this figure is related to a different measurement, that is, a score measurement as seen in box 280 and does not relate to the measurement for (worst case edit distance - edit distance)/worst case edit distance. Moreover, this Figure also is based on the entire word. There is no disclosure in KWOK that would lead one of ordinary skill in the art to calculate part of the input symbol string and wherein that part of the input symbol string has not been examined as required to meet claim 8.

In summary, due to the fundamental differences in how BALLARD and KWOK handle the data to be analyzed, one of ordinary skill in the art would not consider KWOK in combination with BALLARD. Moreover, such combination would not lead to the claimed

invention because the proposed combination of references does not disclose a method to calculate "the remaining part of the input symbol string not examined in the distance calculation in order to determine a length distance calculation.

Accordingly, it would not have been obvious to combine the references in the manner suggested to meet claim 8.

Independent claims 15 and 16 include similar features and the analysis above regarding claim 8 as to these features also applies to claims 15 and 16.

The dependent claims are believed to be patentable at least for depending from an allowable independent claim.

Conclusion

Appellant respectfully urges that the rejections on appeal cannot be sustained and must be reversed, and such is respectfully requested.

Respectfully submitted,

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April 15, 2010